

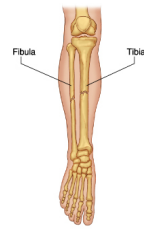
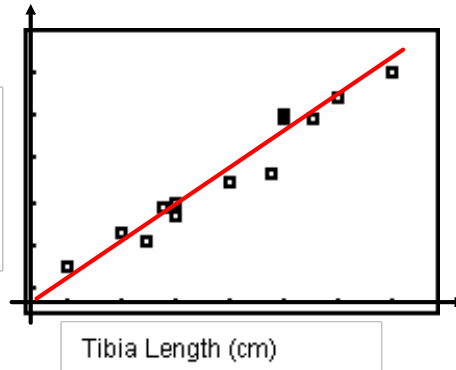
3.1 - Plotted Points & Relationships

1. The graph shows the plotted points rising upwards to the right.
 - Agree
 - Disagree
 - Pass

2. As the length of the tibia increases the length of the leg increases.
 - Agree
 - Disagree
 - Pass

3. The graph can be used to determine the length of a person's leg if you know the length of the tibia bone.
 - Agree
 - Disagree
 - Pass

Leg Length (cm)

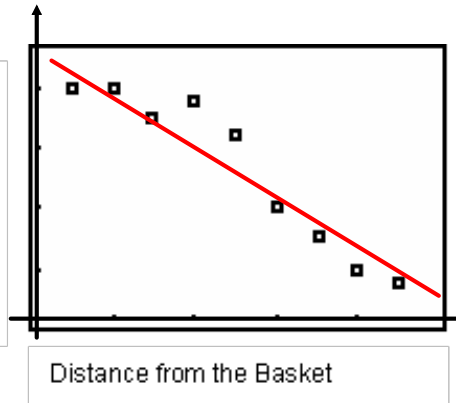


1. The graph shows the plotted points falling to the right.
 - Agree
 - Disagree
 - Pass

2. As the distance from the net increases the number of baskets made decreases.
 - Agree
 - Disagree
 - Pass

3. The graph can be used to determine the number of baskets you will make if you know the distance from the basket.
 - Agree
 - Disagree
 - Pass

Number of Baskets

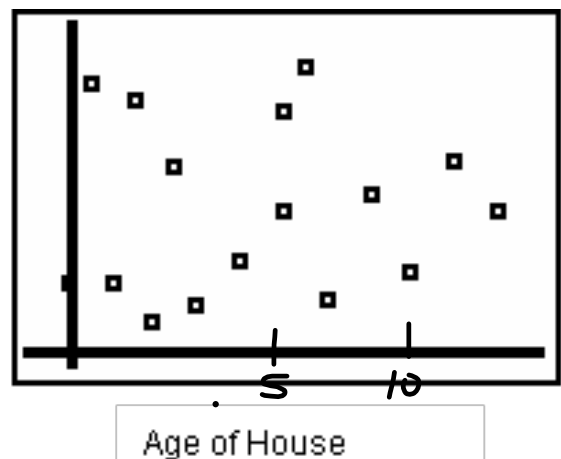


1. The graph shows the plotted points scattered.
 - Agree
 - Disagree
 - Pass

2. As the age of the house increases the price of the house is either large or small.
 - Agree
 - Disagree
 - Pass

3. The graph can't be used to determine the price of the house if you know how old it is.
 - Agree
 - Disagree
 - Pass

House Price (\$)



Looking for a pattern
→ no correlation

Ex.1. Lake Turkana is in the Great Rift Valley in northwest Kenya. As part of a study of water quality, the water temperature in the lake was measured at different depths.

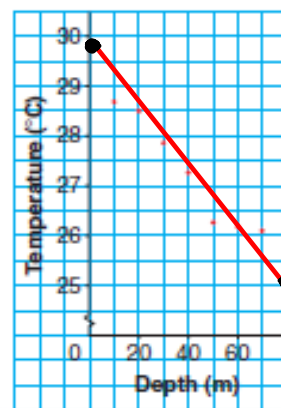
The data are shown in this scatter plot.

a) What was the approximate temperature at a depth of 70 m? At the surface? 26°C, 30°C

b) At what depth was the temperature a little more than 27°C? 40 m

c) Do the points in the scatter plot show a relationship? relationship?
Explain your thinking.

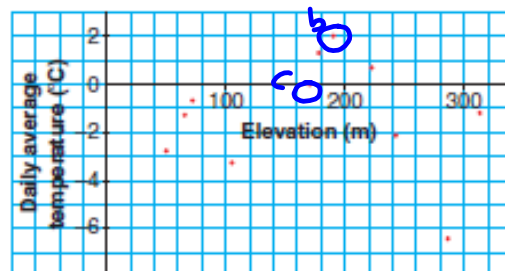
Water Temperature and Depth in Lake Turkana



As depth increases temperature decreases

- Ex. 2.** a) What does this scatter plot show?
b) One data point is for Windsor, with elevation 190 m. What is the average daily temperature in Windsor for March?
c) One data point is for Dunnville, with an average daily temperature of 0°C for March. What is Dunnville's approximate elevation?
How do you know?
d) Describe any trends in the data.
Justify your answer.

Average Daily March Temperature for Selected Ontario Cities and Towns



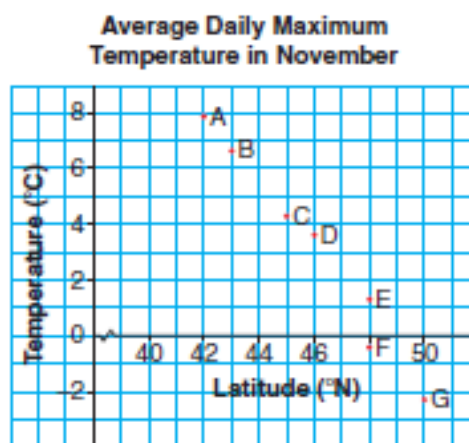
Elevation is the height of a city or town above sea level.

- a) Daily average temperature vs elevation in meters
b) 2°C
c) 170 m
d) Not trend

Ex. 3.

The scatter plot shows temperature data for some Ontario cities in November.

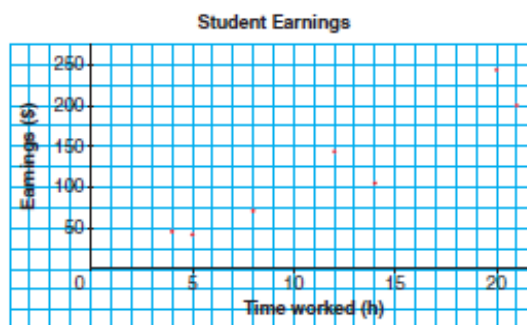
- What does point D represent?
- What do points E and F represent?
- What does point G represent?
- Is there a trend in the data? Explain.



- average daily temperature of about 3.6°C at a latitude of 46°N .
- two cities with latitude 48°N . They have different temperatures.

Ex. 4. As part of a social studies project, a group of high school students compared their earnings from part-time jobs.

- One student earned \$112.
 - How many hours did she work?
 - How many students earned more money than this student?
 - Did any of these students work fewer hours? Explain.
- About how much did the student who earned the most make?
 - How many hours did this student work?
 - Did any students work more hours?
- Describe any trends in the data. Justify your answer.

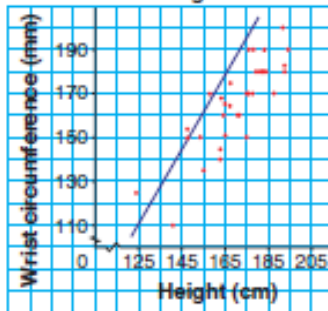


Ex. 5.

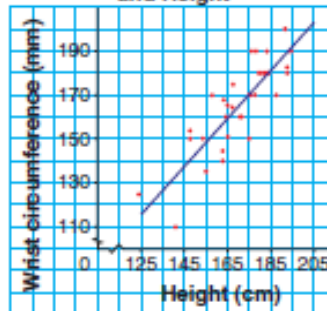
Adrianna drew a scatter plot and three different lines.

Which line would you use as a line of best fit? Justify your choice.

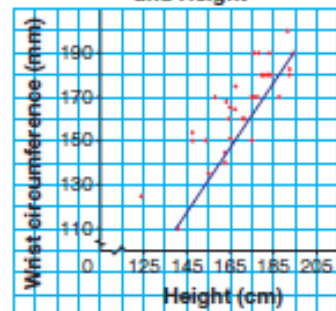
a) Wrist Circumference and Height



b) Wrist Circumference and Height



c) Wrist Circumference and Height

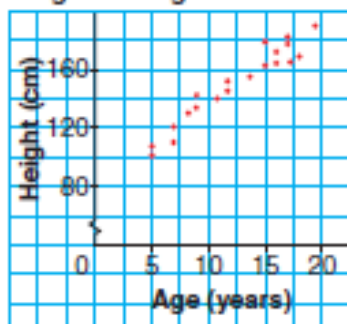


Ex. 6. a) Only one of these scatter plots may be modelled with a line of best fit.

Which is it? Explain why you should not draw a line of best fit for the other scatter plot.

b) Draw a line of best fit for the plot you chose in part a.

Height and Age of Students



Height and Time to Travel to School for High School Students

